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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,037	11/14/2006	Fraser James Buchanan	36290-0425-00-US (229895)	4052
23973 7590 03/17/2010 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE, SUITE 2000 PHILADELPHIA, PA 19103-6996			EXAMINER SCOTT, ANGELA C	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 03/17/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,037	<b>Applicant(s)</b> BUCHANAN, FRASER JAMES	
	<b>Examiner</b> Angela C. Scott	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 19-22, 24, 27-34, 36 and 39-48 is/are pending in the application.
- 4a) Of the above claim(s) 1, 19-21, 30-33 and 42-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22, 24, 27-29, 34, 36 and 39-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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**DETAILED ACTION**

Applicants response of December 30, 2009 has been fully considered. Claims 2-18, 23, 25, 26, 35, 37 and 38 are canceled and claims 1, 19-22, 24, 27-34, 36, and 39-48 are pending with claims 1, 19-21, 30-33, and 42-48 withdrawn from consideration.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22, 24, and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Shalaby (US 2004/0133237).

Regarding claims 22 and 29, Shalaby teaches an absorbable medical device, such as a suture, having controlled physical properties, that is irradiated with radiation from an electron beam (¶4, 6). A suture has a core and an outer surface by definition. It is the outer surface that is irradiated with the radiation because the irradiation occurs after the article has formed (¶6). These sutures are sterilized, so therefore, the entire outer surface is irradiated (¶6). Shalaby also teaches that the controlled physical property can be controlled mass loss of the suture, i.e., controlled degradation of the suture through molecular weight loss. Moreover, Shalaby teaches that it is the irradiation which changes the physical properties and the physical properties vary inversely with the radiation dose (¶5). In other words, the more radiation something receives, such as the outer surface of the suture, the less its physical property, i.e., molecular weight. Therefore, since the outer surface receives more of the radiation, it would have a lower molecular weight than the inner core of the suture. This difference in molecular weight is by definition a gradient (changes gradually). Finally, the rate of bioabsorbability, i.e., degradation, is dependent upon the molecular weight of the component. Therefore, since the outer surface has a lower molecular weight, it would have a greater rate of bioabsorbability.

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Regarding claim 24, The rate of bioabsorbability (degradation) the suture (implant) is determined by the type of polymer and the amount of radiation it receives. Therefore, one can predetermine what this rate should be.

Regarding claims 27 and 28, Shalaby teaches that the suture is made from poly(glycolide-co-trimethylene carbonate polymers (¶6). The whole suture is made of this polymer.

Claims 34, 36, and 39-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Shalaby (US 2004/0133237).

Regarding claims 34 and 41, Shalaby teaches an absorbable medical device, such as a suture, having controlled physical properties that is irradiated with radiation from an electron beam (¶4, 6). A suture has a core and an outer surface by definition. It is the outer surface that is irradiated with the radiation because the irradiation occurs after the article has formed (¶6). These sutures are sterilized so therefore, the entire outer surface is irradiated (¶6). Shalaby also teaches that the controlled physical property can be controlled mass loss of the suture, i.e., controlled degradation of the suture through molecular weight loss. Moreover, Shalaby teaches that it is the irradiation which changes the physical properties and the physical properties vary inversely with the radiation dose (¶5). In other words, the more radiation something receives, such as the outer surface of the suture, the less its physical property, i.e., molecular weight. Therefore, since the outer surface receives more of the radiation, it would have a lower molecular weight than the inner core of the suture. This difference in molecular weight is by definition a gradient (changes gradually). Finally, the rate of bioabsorbability, i.e., degradation, is dependent upon the molecular weight of the component. Therefore, since the outer surface has a lower molecular weight, it would have a greater rate of bioabsorbability.

Regarding claim 36, The rate of bioabsorbability (degradation) the suture (implant) is determined by the type of polymer and the amount of radiation it receives. Therefore, one can predetermine what this rate should be.

Regarding claims 39 and 40, Shalaby teaches that the suture is made from poly(glycolide-co-trimethylene carbonate polymers (¶6). The whole suture is made of this polymer.

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***Response to Arguments***

Applicant's arguments with respect to claims 22-39 and 34-41 have been considered but are moot in view of the new ground(s) of rejection.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela C. Scott whose telephone number is (571) 270-3303. The examiner can normally be reached on Monday through Friday, 8:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796

/A. C. S./  
Examiner, Art Unit 1796  
March 12, 2010